

### Acknowledgments

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### Literature Cited

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### SCIENTIFIC NOTE

#### NOTES ON NEARCTIC *HELICHUS* (COLEOPTERA: DRYOPIDAE)

The genus *Helichus* Erichson was established for the nearctic species *lithophilus* (Dryops) Germar in 1847. Since that time almost sixty names and descriptions have appeared for species from nearly all continents, which have been assigned to that genus. In the Nearctic Region alone approximately twenty names have been proposed.

Revisionary studies of the nearctic forms are still incomplete; nevertheless, some facts may be securely presented at this time.

A small complex of species exists within the "lithophilus group" of Hinton (1935, Pan-Pac. Entomol., 11:71), consisting of *striatus* LeConte, *foveatus* LeConte, and *columbianus* W. J. Brown. For almost half a century all three names have been considered as applying to a single species population occurring transcontinentally in North America (cf. Brown, H. P., 1972, USEPA Water Poll. Control Res. Ser. 18050ELD04/72:1-82).

It is now possible to state that *H. columbianus* Brown is a distinct species. Its range extends from central California at least into southern Oregon, all across southern British Columbia, and into western Montana.

*Helichus striatus* LeConte occurs from southeastern British Columbia (apparently in the same streams as *H. columbianus*) completely across southern Canada, including western Newfoundland (reported here for the first time), as well as adjacent parts of the United States. This species is unknown from the west coast of the U.S. In the East I have seen specimens only from as far south as Connecticut, southern New York, Indiana, Illinois, and Iowa. Except for a record in extreme southern Indiana given by Finni and Skinner (1975, *J. Kans. Entomol. Soc.*, 48:388–395), all eastern localities appear to be in recently glaciated country.

It is not yet possible to certainly settle the status of populations ranging from northern Mexico to Utah and Nevada. LeConte described *H. foveatus* from New Mexico, which may be, at most, a subspecies of *striatus*. In any event, *foveatus* is not the same as *columbianus*.

Differences between *columbianus* and *striatus* will be presented in detail in a future publication. Here it may simply be noted that *columbianus* is a larger more robust form that has a noticeable inflation of the elytra at the apical two-fifths (absent in *striatus/foveatus*). Males of the two species are readily distinguishable by examining the lateral aspect of the genitalia. Thus, in *columbianus* the lateral lobes are gradually acuminate to the tip; in *striatus/foveatus* the lateral lobes are continuously smoothly rounded, being blunt at the extreme tip. Holotypes of these species have been studied.

In Musgrave's synopsis of the genus (1935, *Proc. Ent. Soc. Wash.*, 37:137–145) a geographical record for *H. confluentus* Hinton has been a puzzle, and has been repeated in the literature. It requires correction.

Musgrave reported *H. confluentus* as occurring in Georgia at Rabun Bald, as well as in the southwestern United States, where it undoubtedly lives. Examination of collections of the Academy of Natural Sciences of Philadelphia disclosed a series of nine specimens studied by Musgrave, which evidently led to the error. (Another specimen from this series is present in the Musgrave Collection at the Illinois Natural History Survey.) All bear the same Georgia locality data, and were in extremely dirty condition. After cleaning it was discovered that three species were included in the series, all of which are common in the southwestern U.S., and all otherwise unknown from the southeastern states. It seems clear enough that the set of specimens simply received an incorrect label during preparation, and that Musgrave was misled. The Georgia record for *confluentus* should be removed from future catalogs.

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